

---

# ***Industry Impacts 2009 Novel H1N1***

Liz Wagstrom, DVM, MS, DACVPM  
National Pork Board

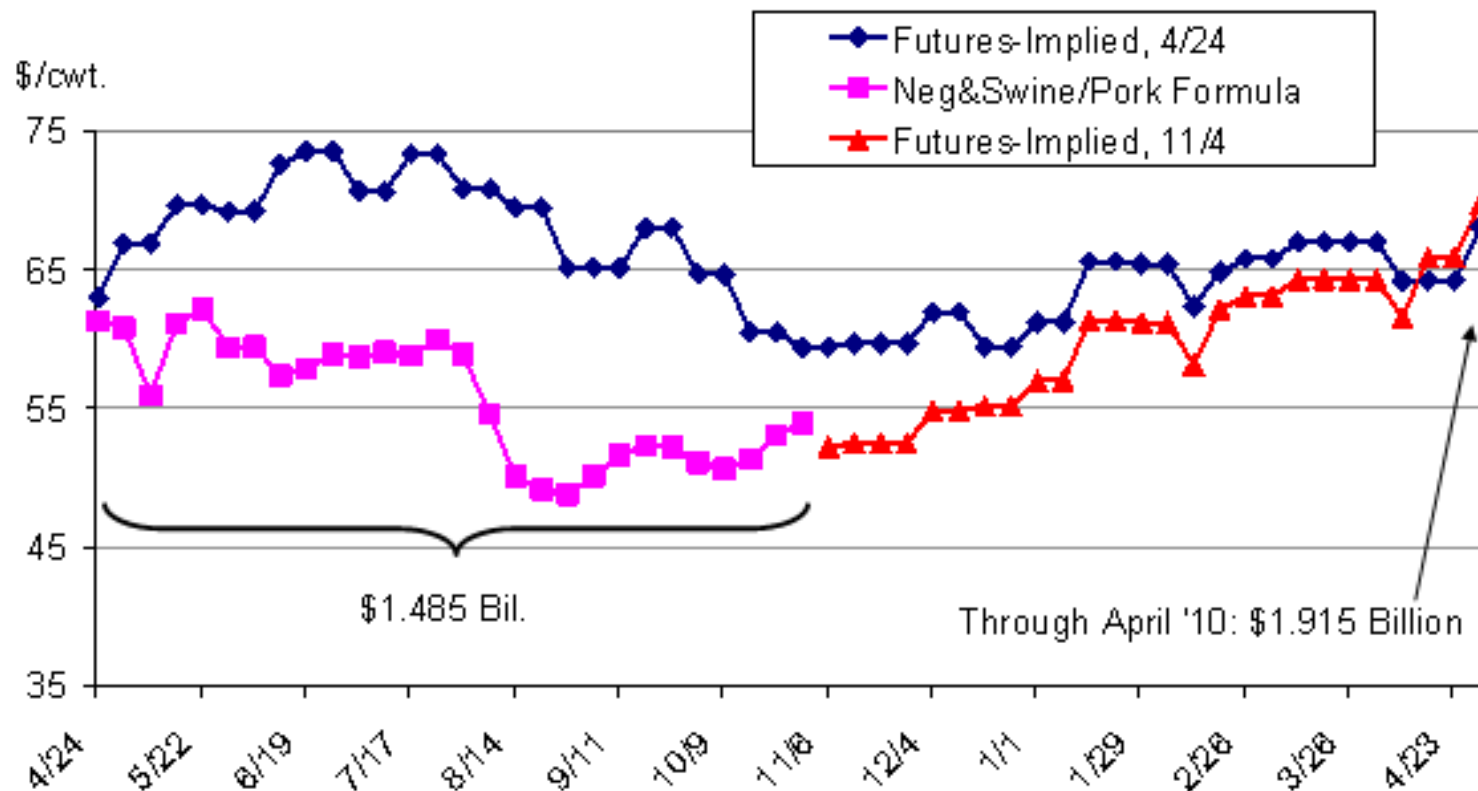
# ***Challenges and Opportunities***

---

- Economics
- Public perception
- Public health/Occupational health
- Swine health
- Industry response

# Economic Impact

## PROJECTED & ACTUAL HOG PRICES, PRE AND POST H1N1 -- AS OF 11/4



Sources: Paragon Economics, Inc. using data from USDA Agricultural Marketing Service, Reports LM-HG-200, LM-HG-201 and CME Group Lean Hogs Futures closing prices

# ***Economic Impact***

- Immediate, short-lived decrease in domestic demand. That impact quickly over and cash prices rebounded to over \$60/cwt carcass.
- Reduction of exports from the level they would have achieved. Mexico, Russia and China
- Since early July, pork supplies have been larger than was expected last spring.

# ***Economic Impact – Trading Partners***

- Mexico – economic consequences of the outbreak in Mexico
  - Pork consumption fell >80% in first weeks
  - Economy suffered
  - Business closings affected food service
- Russia – restrictions largely on certain states
- China – major trading partner with market closed the longest

# ***International Trade***

---

## ■ China

- Has had large supplies of domestic pork
- Requests for H1N1 interventions of some trading partners
  - » Disinfecting containers
  - » Testing meat
- Reports of H1N1 in Chinese herd appears to have eased some restrictions

# Public Perception

- Within 2 weeks over 90% of pork eaters knew that H1N1 was not foodborne
  - Domestic demand – Jan-Jul >4%
- Last survey – 97% of pork eaters agree that you cannot get H1N1 from eating or handling pork
- CDC, WHO, USDA have been credible and coordinated with a “pork is safe” message

# Public Health

- Close working relationship with public health – federal and state
- Develop and review each others materials
- Develop and review response plans
  - i.e. show pig exhibition guidelines

**What Pork Producers and Workers Need To Know About Influenza (Flu) In Pigs and People**



**Introduction**

In April 2009, an outbreak of 2009 H1N1 influenza virus infections were detected in people in North America and then spread around the world. In October 2009, the first case of 2009 H1N1 influenza virus in a pig in the United States was confirmed. Pig infections with 2009 H1N1 flu have been found in other countries, including Canada, Australia and Argentina.

**As a pork producer, you may have questions about the difference between the 2009 H1N1 influenza virus and common swine influenza viruses. This document addresses what is known about the swine influenza viruses that have been found in pigs and what workers can do to avoid getting sick.**

**Swine Influenza Virus Infections In Pigs**

Swine influenza is a respiratory disease of pigs caused by type A influenza viruses. Pigs most commonly get infected with flu viruses from other pigs (swine flu), but also can get infected with flu viruses from birds (avian flu), and from people (human flu). This cross-species spread of flu viruses can lead to new types of flu viruses. At this time, there are three main influenza subtypes that circulate in U.S. pigs: H1N1, H1N2 and H3N2.

Flu outbreaks in pigs are common and can result in high rates of illness but low deaths in herds.

Signs of swine flu in pigs include:

- Coughing ("barking")
- High fevers
- Discharge from the nose
- Sneezing
- Breathing difficulties
- Going off feed

The number of subtypes and strains of flu virus circulating among U.S. herds has complicated vaccine programs for swine and resulted in increased economic loss from illness in pigs.

USDA November 02, 2009





# ***Exhibition Guidelines***

---

- Exhibition risk assessment
  - NASPHV, purebred organizations, extension youth advisors, State Animal Health Officials, AASV and others
- Draft Guidelines issued
  - Distributed to show organizers, SAHOs, others
- Response Document developed
  - NASPHV, SAHOs

# Occupational Health



- Pigs and people can share influenza viruses  
(not to mention birds, ferrets, etc.)
- Pig to human transfer of influenza has happened occasionally in the past
- Usually – no widespread person-to-person spread
- Have provided flu information for several years
- New biosecurity info also available

http://www.pork.org/documents/News/Novel%20H1N1%20Biosecurity%20Recommendations%20for%20Produce - Windows Intern...

http://www.pork.org/documents/News/Novel%20H1N1%20Biosecurity%20Recommendations%20for%20Producers%20v2.pdf

## Novel H1N1 Biosecurity Recommendations for Producers

**Novel H1N1 virus can infect pigs**

The novel 2009 H1N1 virus has now been identified in pig herds in Asia, Europe, North and South America and Australia. This includes positive confirmation in herds in the United States.

With this in mind, U.S. pork producers need to be more vigilant than ever to protect themselves, their workers and their pigs from further spread of this novel virus.

CDC H1N1 Flu | Interim Guidance for People who have Close Contact with Pigs in Non-commercial S - V

http://www.cdc.gov/h1n1flu/guidelines\_commerical\_settings\_with\_pigs.htm

CDC Home  
Centers for Disease Control and Prevention  
Your Online Source for Credible Health Information

A-Z Index A B C D E F G H I J K L M N O P Q R S T U V W X Y Z #

## H1N1 Flu

- H1N1 Flu**
- General Info
- Info for Specific Groups
- Health Care Providers
- State & Local Health Officials
- Laboratorians

[H1N1 Flu > Info for Specific Groups > People in Contact with Pigs](#)

### CDC Interim Guidance for Workers who are Employed at Commercial Swine Farms: Preventing the Spread of Influenza A Viruses, Including the 2009 H1N1 Virus

November 3, 2009 1:00 PM ET

# ***Occupational Health***

---

- No official surveillance system for swine workers
- Research projects will capture some data
  - UMN - Swine Influenza at the Interface of Pigs and People
  - Other NIH Influenza Centers also studying
- Direction of influenza transfer may be difficult to ascertain

# Swine Health

- USDA research began quickly and is available to the public
  - CDC provided isolates
- Diagnostic laboratories and USDA lab network developed diagnostic tests quickly
- USDA/CDC surveillance program quickly launched
- Vaccine development moving forward

# ***Industry Response and Next Steps***

---

- Immediate activation of crisis team
- Close collaboration with industry stakeholders
  - AASV, NPPC, NPB, USMEF
  - Coordination with US and International Agencies
- Development of response and recovery plans

# ***Response plans***

---

- Egypt slaughtered all pigs in the country
- First Canadian herd quarantined and then depopulated
- First Norwegian herds depopulated
- Australian herds quarantined
- US needed a plan that would allow pork producer business continuity while protecting public health

# Response plans

- State animal health official
- Monitored movement with herd's veterinarian
- Minimal media (national basis)

The screenshot shows a Windows Internet Explorer browser window. The address bar displays the URL: <http://www.pork.org/documents/News/Actions%20Surrounding%20a%20Suspect%20or%20Confirmed%20case%20of%20Novel%20H1N1%20Infection%20in%20Pigs>. The page title is "Actions Surrounding a Suspect or Confirmed case of Novel H1N1 Infection in Pigs". The main content area contains the following text:

The pork industry has worked successfully for many years with State and Federal Animal Health Officials on programs that protect and improve the health of the U.S. Swine herd. The solid working relationships between State Animal Health Officials, attending swine veterinarians and pork producers provides the necessary health assurances that keep the pork industry moving on a daily basis. From a swine health perspective the novel H1N1 virus presents a risk to the U.S. herd. If the novel H1N1 is suspected or detected in U.S. pigs the normal working relationship between State Animal Health Officials, attending veterinarians and pork producers will be sufficient to manage and resolve the situation.

The information below outlines actions that will occur if novel H1N1 is suspected or confirmed in swine. **It is important to remember that State Animal Health Officials are the primary source of**

The bottom of the screenshot shows the Windows taskbar with the Start button, several open applications (Spring..., 7 M..., 3 M..., http..., TP..., Infl..., PUBL...), a battery level indicator at 69%, and the system clock showing 6:50 AM on 6/30/09.



# Surveillance

- USDA/CDC surveillance plan under development for almost two years
- Human health goals
  - Identify emerging strains for diagnostic reagent development and vaccine production
- Swine health goals
  - Identify emerging strains for diagnostic reagent development and vaccine strain updating
  - Understand the epidemiology of influenza in swine to provide better disease control

# Surveillance

- Lack of industry impact from positive pigs in MN, SD and Indiana
  - Market impact
  - Producer impact
- Participation will demonstrate value of a comprehensive swine disease surveillance program
- Provides a chance to make this challenge an opportunity